

***In The Name OF Allah***



**The University Of Guilan**

**Rasht- Iran**

**The Effects of Cognitive Strategies- Note Making and  
Underlining- on Iranian EFL Learners' Reading  
Comprehension**

A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Arts in Teaching of English  
Language

**By**

Sadaf Azimi

**Supervisor**

Dr. A. Mahdavi

**Advisor**

Dr. M. Khalili Sabet

**June, 2012**

## Table of contents

---

	Page
Approval.....	I
Dedication.....	II
Acknowledgements.....	III
Abstract.....	IV
List of tables.....	IX
List of figures.....	X

## Contents

<b>Chapter one: introduction.....</b>	<b>1</b>
1.1 Overview.....	1
1.2 Statement of the Problem and Purpose of the Study.....	5
1.3 Significance of the Study .....	6
1.4 Research questions and hypotheses.....	7
1.5 Delimitations of this study.....	8
1.6 Definition of Important Terms.....	9
1.7 Outline of the study.....	11

<b>Chapter two: Review Of the Related Literature.....</b>	<b>14</b>
2.1 Introduction.....	15
2.2 Language Learning Strategies.....	16
2.3 Reading Comprehension Strategies.....	21
2.4 The Cognitive Tasks Involved in Reading.....	25
2.5 Approaches towards Teaching Reading.....	26
2.6 Strategies for the EFL Reading Classroom.....	30
2.7 Making Notes of the Selected Parts of a Text.....	35
2.8 Making Notes and Reading Comprehension.....	38
2.9 Underlining Strategy .....	42
2.10 Empirical Studies .....	44
<b>Chapter three: method.....</b>	<b>57</b>
3.1 Overview.....	58
3.2 The Design of the Study.....	63

## Table of contents

---

3.3 Participants.....	59
3.4 Instruments and Materials .....	60
3.4.1 Tests: .....	60
3.4.2 Instructional Materials: .....	62
3.5 Data Collection Procedure.....	63
3.5.1 Pilot Study.....	63
3.5.2 Overall Procedures.....	64
3.6 Data Analysis Procedures .....	66
<b>Chapter four: results and discussions.....</b>	<b>69</b>
4.1 Introduction.....	69
4.2 Results.....	70
4.2.1 Pilot Study.....	70
4.2.2. General Language Proficiency Test.....	70
4.2.3 Descriptive Statistics for the Pre -Test Scores of Reading Comprehension.....	74
4.2.4 Descriptive Statistics for the Post - Test Scores of Reading Comprehension.....	76
4.2.5 The First Research Question: .....	77

## Table of contents

---

4.2.6 The Second Research Question.....	78
4.2.7 The Third Research Question.....	78
4.3 Discussion.....	80
<b>Chapter five: Conclusions, Implications, and Suggestions for Further Study.....</b>	<b>85</b>
5.1. Introduction.....	85
5.2. Conclusions.....	86
5.3. Pedagogical Implications.....	88
5.4 Limitations of the study.....	91
5. 5. Suggestions for further studies.....	92
<b>References.....</b>	<b>95</b>
<b>Appendices.....</b>	<b>114</b>
<b>Abstract (Persian).....</b>	<b>136</b>

## List of Tables

---

	Page
Table 2. 1 Inventories of language learning strategies.....	20
Table 3.1: the design of the study .....	58
Table 3.2: Sample population .....	60
Table 4.1 Reliability Statistics of the Reading Test (pilot study) .....	70
Table 4.2 Statistics for the NELSON Test .....	71
Table 4.3 Statistics for the Skewness Analysis .....	71
Table 4.4 Descriptive Statistics for the Three Groups on NELSON Test.....	73
Table 4.5 One Way ANOVA for the Three Groups on PET Test .....	73
Table 4. 6 Descriptive Statistics for the Results of the Pre – Test.....	74
Table 4.7 One Way ANOVA for the Three Groups on Pre-Test.....	75
Table 4. 8 Descriptive Statistics for the Results of the Post– Test.....	76
Table 4.9 One Way ANOVA for the Three Groups on Post-Test .....	76
Table 4.10 Multiple Comparisons for the Three Groups on Post-Test.....	78

## List of figures

---

	<b>Page</b>
<b>Figure 4.1: Scatter Plot for the Two Experimental and Control Group (To Examine the Normality of the Distribution).....</b>	<b>72</b>
<b>Figure 4.2: the Comparison of the Three Groups on NELSON Test.....</b>	<b>73</b>
<b>Figure 4.3: the Comparison of the Three Groups on Pre- Test.....</b>	<b>75</b>
<b>Figure 4.4: the Comparison of the Three Groups on Post- Test.....</b>	<b>79</b>



## Acknowledgments

*A big number of people contributed to the success of this thesis, and I would like to express my sincere thanks and appreciation to them all.*

*Particularly, I would like to express my gratitude to **Professor Mahdavi**, my advisor, whose expertise, understanding, and patience, added considerably to my graduate experience. I appreciate his vast knowledge and skill in many areas, his professional guidance, and his assistance in statistics and editing. I would like to thank the other members of my committee, especially **Professor Khalili** for their encouragement, feedback and comments on the thesis. In addition I would like to express my gratitude to the examiners **Dr. Barekat** and **Dr. tahriri** who accepted to be the thesis examiners. And my special appreciation to **Dr. Barekat** for his immense knowledge, guidance in teaching me how to write a thesis step –by-step.*

*I would also like to thank the principals and instructors of **Guilan University**. In addition ,I owe profound thanks to my lovely mother and father who always have encouraged me to continue my education and my husband ,**Dr. F. Mohseni** for his continuous incitements to persevere, and unending support and my warmest appreciation to my sons **Bardia** and **Arshia** who gave me their time and tolerance and cooperated with me .*

*I would like to acknowledge my good friend **Mrs. Abbasi** for helping me and who also did some editing of several parts of my thesis and my other friend ,**Julie Monti Safari** ,for also editing the thesis and offering some comments.*

*And Lastly, I offer my appreciation to all my friends and instructors those who supported me without which I wouldn't have been able to dedicate any time for my studies.*



## Abstract

---

The purpose of this study was to investigate the effects of using cognitive strategies namely note making and underlining, on the performance of Iranian EFL learners' reading comprehension. In doing so, 60 female grade four high school EFL learners were selected from a larger population by means of a language proficiency test (NELSON test). They were then divided randomly into three groups, each group consisting of 20 homogeneous students: two experimental groups i.e. note making and underlining, and one control group. The experimental groups were instructed to apply note making and underlining reading strategies on the same reading materials while the control group received the placebos of reading comprehension materials. The treatment period on the experimental groups lasted 10 weeks. Then, all the subjects in the three groups took the same reading comprehension test.

The mean scores of both experimental groups and that of the control group were compared through One-way Analysis of Variance (ANOVA). The results of post-hoc analysis of Scheffe test showed that the learners who utilized note making and underlining reading comprehension strategies outperformed the control group ( $p < .05$ ). Furthermore, the experimental group who received note making revealed a higher efficiency than underlining group but the difference between the two experimental groups was not statistically significant ( $p > .05$ ). As a result it can be concluded that note making and underlining have had positive effects on students' rate of reading comprehensibility

**Key words:** Cognitive Strategies, Note- Making, Underlining, EFL Learners, Reading Comprehension

**1.1 Overview**

Reading is the kind of process in which one needs to not only understand its direct meaning, but also comprehend its implied ideas. As Tierney (2005) states, *“Learning to read is not only learning to recognize words; it is also learning to make sense of texts”* (p. 51). *It involves a great deal of cognitive capacity available for comprehension* (Pressley, 2002). For example, good readers know that comprehension is most likely to occur from reading actively. They know how to relate what is being read to prior knowledge, how to predict what might be coming up in the text, how to ask questions while reading, construct images of ideas being conveyed in the text, and summarize what is being read. If students are capable of comprehending what they are reading through a variety of strategies, they will create an interested and self-regulative attitude toward the path of academic achievement (Pressley, 2002).

It is generally understood that reading comprehension is an interactive mental process between a reader’s linguistic knowledge, knowledge of the world, and knowledge about a given topic. While reading, the reader constructs various representations of the text that are important for comprehension. Field (2002) argues that those representations include the surface code (the exact words of the text), the text code (main ideas representing the meaning of the text), and the mental models (the way in which information is represented in mind) that are embedded in the text.

According to Nunan (2003), reading comprehension is a fluent process of combining information from the text and the existing schemata to understand the meaning. Therefore, reading for comprehension or meaning is one primary purpose for reading. But there are some obstacles to successful understanding.

As Gersten, Williams, Fuchs, and Baker (2001) state, “*Many of them arise in the strategic processing of text. For example, students may not possess appropriate strategies for problem situations or they may not know when to use a strategy they, in fact, do possess*” (p. 280).

Reading comprehension is specifically the basic goal for ESL/EFL students to gain an understanding of the world and of themselves, enabling them to think about and react to what they read (Tierney, 2005). According to Grabe (1991), reading is an essential skill and probably the most important skill for second language learners to master in academic contexts. Since reading comprehension has been distinctively important both in first and second/foreign language learning, reading strategies are of great interest to the field of reading research. Reading research in recent years has also shed light on perception of strategies, and strategy use/training in reading comprehension.

Since 1970s, there have been a variety of reading strategies advocated by second language learning theorists to teach students to read well (Carrell, 1989). These strategies include skimming, scanning, contextual guessing, skipping unknown or ambiguous words, critical reading, making inferences, etc., all of which are recognized as traditional reading skills (Carrell, 1989).

Notable researchers such as Brown, Baker, and Flavell have studied several different aspects of the relationship between cognitive strategies and effective reading. Flavell et al, (1981) pointed out that if a reader is aware of what is needed to perform effectively, it is possible to take steps to meet the demands of reading comprehension more efficiently.

Thus far, there has been increasing interest in the implementation and investigation of cognitive strategies in both first and second language reading instructions; nevertheless, they still remain limited, especially for EFL reading comprehension (Carrell, Pharis, & Liberto; as cited in White, 2004).

The main goal of the present study was to examine the effects of two cognitive strategies namely underlining and selective reading strategy (which includes selecting important parts of the text and making notes of the selected parts) on Iranian EFL learners' reading comprehension.

Underlining has mixed results in reading research.

*“...readers who are skillful at looking for signals or who have been instructed extensively on finding the main points to underline are the only ones who benefit from engaging in either process (Golding & Fowler, 1992, p. 99; Wade & Adams, 1990,p. 335).”*

Several studies achieved this conclusion that linguistic variables as well as reader goals, interest, and teacher expectations in school settings had a significant effect on readers' use of underlining strategies to find out main ideas in a passage (Brown & Day, 1983; Afflerbach, 1990; van Hout- Wolters, 1990). Weinstein and Mayer (1986) called underlining a complex rehearsal strategy.

Theoretically, if important ideas are found, marked, and reviewed, performance on subsequent test is enhanced (Baker, 2004). Also, many scholars report that students feel a sense of security while underlining as they believe they are selecting the important ideas, monitoring their understanding while reading, and preparing the text for later review (Ahamd & Asraf, 2004).

In language teaching, reading is recognized as an activity that engages students more actively with materials in the target language and encourages a deeper processing of it, since it is considered to be a communicative process which conveys meaning from writer's to the reader's mind (Nuttal, 1996).

Both note-making functions assist students in paying more attention to important points and less attention to trivial details. For students to take full advantage of both functions, they must both make notes as well as review them (Robinson, Katayama, Odom, Beth, Hsieh, & Vanderveen, 2006). However, the problem is that students are generally poor note-makers, selecting less than half of the critical ideas. If they take and study those notes, they miss out the second function (product effect) because they are reviewing incomplete notes (Katayama & Robinson, 2000).

Kiewra, Benton, Kim, Risch, and Christensen (1995) make a distinction between conventional notes and notes made with the help of specific frameworks such as graphic organizers or outlines. Conventional notes which are the main concern of this study are the notes which are made as a result of students' usual note-making habits. Outline and graphic notes, on the other hand, are made with the help of organizational devices which, by showing the organization of ideas and their relationships, guide students in making more effective notes.

Language educators have approached making notes from different perspectives (Carrier, 2003; Fajardo, 1996; McKeating, 1981; Slotte & Lonka, 2003). Some researchers (Kern, 1997; Singhal, 2001) have found positive relationships between making notes and learning. Other studies (Ladas, 1980; Anderson, 1991) indicate that making notes has no effect on achievement. A few researchers have even found that making notes of the selected parts of the text has an adverse effect on student

achievement (Hartley, 2002; Ornstein, 1994; Peck & Hannafin, 1983). The studies showing no difference or negative results were analyzed by Ladas (1980, cited in Boon, 1989) and serious methodological weaknesses were found in them.

Green and Oxford (1995) emphasize the importance of finding the relationship, if any, between the use of strategies and learner variables such as gender, language proficiency, or motivation. Whether or not making notes and underlining key words strategies have an effect on students' achievement is still open to dispute. The results of the experimental studies on these issues are sometimes opposed and yet many questions remain unanswered and the researchers have suggested that more research needs to be conducted on the topics to determine if practicing making notes and underlining strategies can boost students' achievement (Bretzing, Kulhavy, Caterino, 1987; Chen, 2007; Falout, 2002; Palmatier, 1971; Peck & Hannafin, 1983; Wilson, 2003).

## **1.2 Statement of the Problem and Purpose of the Study**

Reading is an important skill in learning a foreign language and reading comprehension is claimed to be the main purpose of foreign language teaching in Iran (Hayati et al. 2008). But acquiring and mastering this skill seems complex to many learners and they often find it difficult to exploit this skill in their learning experience. On the other hand, the findings of many ESL/EFL research projects have shown the positive effects of learning strategy instruction on enhancing reading comprehension of learners (Sadeghi, 2007; Chen, 2007; Hismanoglu, 2000).

Second language teachers do not know for certain whether or not learners know how to improve their reading comprehension. Consequently, majority of the L2 students may fail to gain adequate comprehensive input. It is believed that this is mostly because of



insufficient familiarity and practice of various reading comprehension strategies (Oxford, 1994).

Ignoring or not paying much attention to some new and efficient strategies can be known as one of the problems in this context. To solve the above stated problems, several reading comprehension studies have been conducted (Hulstijn, 1992; Hulstijn, Hollander, and Greidanus, 1996; Watanabe, 1997).

Although there may indeed exist various techniques and activities for improving learners' reading comprehension, the researcher of the present study has focused her attention on two main cognitive strategies (underlining key words and selecting and making notes of important points). It is hoped that, these two types of cognitive strategies can be regarded as appropriate, enjoyable, and fruitful means for improving Iranian EFL learners' reading comprehension. Therefore, the purpose of the present study was to investigate the effects of two cognitive strategies (making notes and underlining key words) on Iranian EFL learners' reading comprehension.

### **1.3 Significance of the Study**

Reading is one of the most important activities in language classes (Kirby, 2007). One of the main problems that learners of English as a foreign language (EFL) confront is how to improve their reading comprehension proficiency. This is actually the concern of both EFL learners and teachers in Iran since it is the major classroom activity in the Iranian educational system (Hayati et al, 2008).

This study is significant because it will help EFL learners improve their reading comprehension proficiency by the suggested reading comprehension strategies and doing much more activities related to these reading strategies. They will help teachers promote

their students' reading comprehension and find the most important points that help students enhance their performance in taking reading comprehension tests. Moreover, it would prove pedagogical value in EFL classrooms and lead EFL instructors provide the learners with enough information to utilize these strategies in reading comprehension. While Iranian high school English textbooks provide no instructions concerned with using language learning strategies for students to do their reading comprehension exercises by using these strategies, reading comprehension passages are a part of university entrance examination (Sadeghi,2007). In this case, the significance of this study is to make EFL teachers familiar with useful cognitive strategies to enhance EFL learners' reading comprehension.

#### **1.4 Research questions and hypotheses**

*In order to achieve the goal of the study, the specific research questions addressed in this study are:*

- (1) Does making notes of the selected parts of the passage improve Iranian female grade four high school EFL learners' reading comprehension?
- (2) Does underlining key words improve Iranian female grade four high school EFL learners' reading comprehension?
- (3) Is there any significant difference between the effects of making notes and underlining strategies on Iranian female grade four high school EFL learners' reading comprehension ability?

*Based on the aforementioned research questions and in order to investigate the proposed research questions empirically, following null hypotheses were put forward:*

**HO1:** Selecting and making notes does not significantly affect Iranian female grade four high school EFL learners' performance in reading comprehension tests.

**HO2:** Underlining key words does not significantly affect Iranian female grade four high school EFL learners' performance in reading comprehension tests.

**HO3:** There is no significant difference between the effects of making notes and underlining key words on the Iranian female grade four high school EFL learners' performance in tests of reading comprehension.

### **1.5 Delimitations of this study**

Despite the promising results, this study suffered from limitations. Due to its own particular features, this study has certain limitations: Firstly, this study was restricted to learners who were grade four high school students. Another shortcoming was related to the population which was predominantly female.

Another limitation of this study was that this study is just intended to investigate how practicing two cognitive strategies namely making notes and underlining key words contributed to variation in Iranian EFL students' improvement in L2 reading comprehension proficiency.

Yet another limitation of this study was the fact that the only data collection devices were NELSON test and pre- and post reading comprehension tests.

And finally, the limited number of participants can be considered as another limitation of this study. Sixty participants were assigned to three different groups. Hence, this study does not have the generalizability as compared with a large-scale study.

## **1.6 Definition of Important Terms**

### ➤ *Language learning strategies*

Language learning strategies are any set of actions, plans, tactics, thoughts or behaviors that the learners employ to facilitate the comprehension, storage, retrieval, and use of information (Rubin, 1987; O'Malley & Chamot, 1990).

Language learning strategies are the often-conscious steps or behaviors used by language learners to enhance the acquisition, storage, retention, recall, and use of new information (Rigney, 1978; Oxford, 1990).

The term 'language learning strategies' refers to “special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information” (O'Malley & Chamot, 1990, p. 1).

### ➤ *Cognitive strategies*

They are learning strategies that operate directly on incoming information in ways that enhance learning (Oxford, 1994).